REMARKS

In paragraph 2 of the final Action, claims 1-4, 6-21 and 23-50 were rejected under 35 U.S.C. 103(a) as being unpatentable over Dereume et al. in view of Edwin et al. and further in view of McDonald et al.

In view of the rejection, claim 25 has been amended to independent form. Claims 25-31 are pending in the application, and other claims have been canceled.

In a process of producing a stent of claim 25, a tubular stent matrix extendable in a diametric direction is prepared, and flexible solid polymer layers are formed on said stent matrix to cover an entire surface of the stent matrix. Then, a plurality of fine through pores is perforated at portions only where the stent matrix does not exist,

wherein the step of forming the solid polymer layers comprises a step of forming a polymer film by impregnating a mandrel into a liquid resin material for forming the polymer film and pulling up the mandrel; and a step of equalizing the thickness of the polymer film by pulling up the mandrel in a vertical direction and controlling a pulling-up speed.

In the process of the invention, the stent matrix is entirely covered by the solid polymer layers, and thereafter, a plurality of fine through pores is perforated at portions only where the stent matrix does not exist. Accordingly, the stent is not exposed to blood through the fine through pores in use.

In Dereume et al., the pores are formed by leaching/eluting out particulate matter/polymer solvent from the polymer. This process is well explained at, for example, column 6, lines 1-8 and column 6, lines 16-27.

In view of the explanations in Dereume et al. as cited above, it is clear that the pore formation is controlled by the exposure to the solvent in the leaching/eluting process, so that the pores are formed in the liners 33, 34 indiscriminately.

In claim 25, the pores are formed only at portions where the stent matrix does not exist. Dereume et al. does not disclose or suggest the features of claim 25.

Further, in the Action, column 1, lines 45-50 of Dereume et al. was referred to in rejecting claim 25. However, in this section, forming of pores by the phase inversion techniques and so on is only explained.

In claim 25, it is clearly defined that the step of forming the solid polymer layers comprises a step of forming a polymer film by impregnating a mandrel into a liquid resin material for forming the polymer film and pulling up the mandrel; and a step of equalizing the thickness of the polymer film by pulling up the mandrel in a vertical direction and controlling a pulling-up speed.

The features of claim 25 as stated above are not disclosed or suggested by Dereume et al.

Edwin et al. discloses a method for selectively bonding layers of polymeric material to create endoluminal vascular device. Namely, a stent device is encapusulated between two layers. The steps of making a radially expandable stent-graft device are clearly explained at column 8, lines 11-34.

In the steps as disclosed in Edwin et al., the polymeric cover members covering the stent member are not substantially perforated at all.

In claim 25, the pores are formed only at portions where the stent matrix does not exist. Edwin et al. does not disclose or

suggest the features of claim 25, i.e. the specific location where the pores are formed.

McDonald et al. was cited to suggest that lasers could be used to form the pores. Actually, in McDonald et al., a tubular microporous prosthesis is formed by rolling a flexible sheet around a longitudinal axis.

The sheet 11 for forming the tubular prosthesis includes perforation zones 30, 32, 34, 30', 32', 34' having perforations 28 or apertures, which can be made by laser perforation, as explained at column 11, lines 26-39. Thus, the perforations 28 are formed in the flexible sheet 11 by laser, and the sheet 11 with the perforations 28 are rolled to form the tubular prosthesis.

In claim 25, the flexible solid polymer layers are formed on the stent matrix to cover an entire surface of the stent matrix, and then, the pores are formed only at portions where the stent matrix does not exist.

In McDonald et al., the perforations 28 are formed in the sheet 11 forming the stent by laser. Forming the apertures in the flat sheet as disclosed in McDonald et al. is entirely different from forming the aperture in the solid polymer layers in the tubular form assembled with the stent matrix. The features of claim 25 are not disclosed or suggested by McDonald et al.

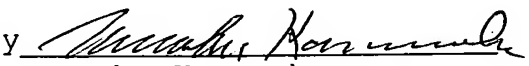
As explained above, the cited references do not disclose or suggest the step of perforating a plurality of fine through pores at portions only where the stent matrix does not exist. Further, the cited references do not disclose or suggest the step of equalizing the thickness of the polymer film by pulling up the mandrel in a vertical direction and controlling a pulling-up speed.

Therefore, even if the cited references are combined, claim 25 is not obvious from the cited references.

As explained above, the features of the invention are not disclosed or suggested in the cited references. Even if the cited references are combined, claims of the application are not obvious from the cited references.

Reconsideration and allowance are earnestly solicited.

Respectfully Submitted,

By 

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